Unilateral Galactorrhea Associated with Low-dose Escitalopram

P. Bangalore Ravi, K. G. Guruprasad¹, Chittaranjan Andrade²

ABSTRACT

Galactorrhea is a rare adverse effect of selective serotonin reuptake inhibitor treatment. We report a 27-year-old woman who developed unilateral breast engorgement with galactorrhea 18 days after initiation of escitalopram (10 mg/day). The symptom remitted 7 days after withdrawal of escitalopram and did not subsequently recur during maintenance therapy with agomelatine (25 mg/day).

Key words: Agomelatine, escitalopram, galactorrhea, prolactin, selective serotonin reuptake inhibitor, unilateral breast engorgement

INTRODUCTION

Galactorrhea refers to the discharge of milk from the breast, unassociated with recent childbirth or nursing. Galactorrhea occurs when serum prolactin levels are raised for reasons ranging from pituitary tumors to drug treatments. A number of drugs, including psychotropic drugs, cause hyperprolactinemia, some doing so consistently (e.g., certain antipsychotics), and some, rarely (e.g., certain antidepressants). [1,2] We herein report an unusual case of galactorrhea resulting from escitalopram use.

CASE REPORT

A 27-year-old housewife presented with a 2-year history of sadness, anxiety, occasional tearfulness, pessimism

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about the future, low self-confidence, diminished interest in daily activities, and diminished interest in social life, poor appetite, and poor sleep. These symptoms were exacerbated by domestic stress and absence of social support. A diagnosis of moderate depression with somatic symptoms was made, and she was started on escitalopram 5 mg/day along with clonazepam 0.75 mg/day. She was instructed to increase the dose of escitalopram to 10 mg/day after 4 days and taper and withdraw the clonazepam at the rate of 0.25 mg/week.

After about 18 days of treatment, she developed painless engorgement of her left breast associated with galactorrhea. Under the assumption that this symptom was a selective serotonin reuptake inhibitor (SSRI)-related adverse effect, escitalopram was tapered and withdrawn across 2 weeks and agomelatine (25 mg/day) was initiated. The breast engorgement and galactorrhea subsided 7 days after discontinuation of escitalopram; neither symptom re-emerged during 9 months of maintenance therapy with agomelatine.

DISCUSSION

Nebhinani^[2] presented a case report and review of literature on SSRI-related galactorrhea. This author^[2]

Department of Psychiatry, NMC Speciality Hospital, Al-Ain, ¹NMC Speciality Hospital, Abu Dhabi, UAE, ²Department of Psychopharmacology, National Institute of Mental Health and Neurosciences, Bengaluru, Karnataka, India

Address for correspondence: Dr. Chittaranjan Andrade

Department of Psychopharmacology, National Institute of Mental Health and Neurosciences, Bengaluru - 560 029, Karnataka, India. E-mail: andradec@gmail.com

identified 23 relevant reports and presented a table of the 12 reports to which he had full text access. Other reports have also been published.^[3] In a nutshell, galactorrhea has been identified in relation to all the marketed SSRIs: Fluoxetine, fluvoxamine, sertraline, paroxetine, citalopram, and escitalopram.

Our patient was unusual in that the galactorrhea was unilateral. As far as we could ascertain, unilateral galactorrhea with SSRIs has been reported only by Koch and Zellmer, [4] I month after commencing treatment with citalopram (20-60 mg/day), and by Canan *et al.*, [5] 3 weeks after starting fluoxetine (20 mg/day). Interestingly, unilateral gynecomastia without galactorrhea was reported by Karakurt *et al.* [6] in association with venlafaxine (150 mg/day) treatment; this drug is also a potent serotonin reuptake inhibitor in addition to being a noradrenaline reuptake inhibitor.

Galactorrhea occurred early in our patient; that is, <3 weeks after treatment onset. In addition, galactorrhea occurred at a low-dose of medication; that is, at 10 mg/day of escitalopram. This is in consonance with literature. SSRI-related galactorrhea is reported to occur as early as 1-3 weeks (commonly) to as late as 5 months (uncommonly) after treatment initiation with doses that are in the low to medium range. [2] In our patient, galactorrhea stopped 1 week after escitalopram withdrawal; this is also in line with previous reports where most cases experienced relief from galactorrhea 1-3 weeks after SSRI withdrawal, rarely earlier, and rarely later. [2,3]

How do SSRIs cause galactorrhea? These drugs may rarely raise serum prolactin levels by serotonin receptor-mediated downstream presynaptic inhibition of dopamine release by tuberoinfundibular dopaminergic neurons, or by direct stimulation of hypothalamic serotonin postsynaptic receptors. These and other mechanisms were discussed in greater detail elsewhere;^[7-9] galactorrhea can be a consequence of the hyperprolactinemia. Curiously, galactorrhea with SSRIs has been reported even with serum prolactin levels in the normal range,^[2,5,8-10] and prolactin-independent mechanisms for antidepressant-related galactorrhea therefore require to be identified.

One possibility is direct action of antidepressant drugs on targets in breast tissue. Unfortunately, our patient could not afford laboratory investigations and so we could not assess the serum prolactin level. We therefore do not know whether galactorrhea in our patient was euprolactinemic or hyperprolactinemic.

CONCLUSION

Unilateral galactorrhea may be a rare adverse effect of SSRI drugs such as escitalopram.

REFERENCES

- 1. Molitch ME. Drugs and prolactin. Pituitary 2008;11:209-18.
- Nebhinani N. Sertraline-induced galactorrhea: Case report and review of cases reported with other SSRIs. Gen Hosp Psychiatry 2013;35:576.e3-5.
- Bharadwaj RS, Slade TB. A case of galactorrhea with escitalopram: A biopsychosocial phenomenon. Prim Care Companion CNS Disord 2011;13:pii: PCC.11101202.
- Koch HJ, Zellmer H. Marked mydriasis and neuritis nervi optici associated with galactorrhea following citalopram treatment: A case report and discussion. Case Rep Med 2011;2011:191735.
- Canan F, Aydinoglu U, Sinani G. Transient normoprolactinemic galactorrhea induced by fluoxetine. J Clin Exp Invest 2013:4:105-6.
- Karakurt F, Kargili A, Uz B, Kaya A, Kosar A, Ozkara A, et al. Venlafaxine-induced gynecomastia in a young patient: A case report. Clin Neuropharmacol 2009;32:51-2.
- Damsa C, Bumb A, Bianchi-Demicheli F, Vidailhet P, Sterck R, Andreoli A, et al. "Dopamine-dependent" side effects of selective serotonin reuptake inhibitors: A clinical review. J Clin Psychiatry 2004;65:1064-8.
- Emiliano AB, Fudge JL. From galactorrhea to osteopenia: Rethinking serotonin-prolactin interactions. Neuropsychopharmacology 2004;29:833-46.
- Gulsun M, Algul A, Semiz UB, Ates MA, Doruk A, Ebrinc S, et al. A case with euprolactinemic galactorrhea induced by escitalopram. Int J Psychiatry Med 2007;37:275-8.
- Belli H, Vardar MK, Yesilyurt S, Gul ES, Ural C. Citalopram related euprolactinaemic galactorrhoea: A case report. West Indian Med J 2010;59:100-1.

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